Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

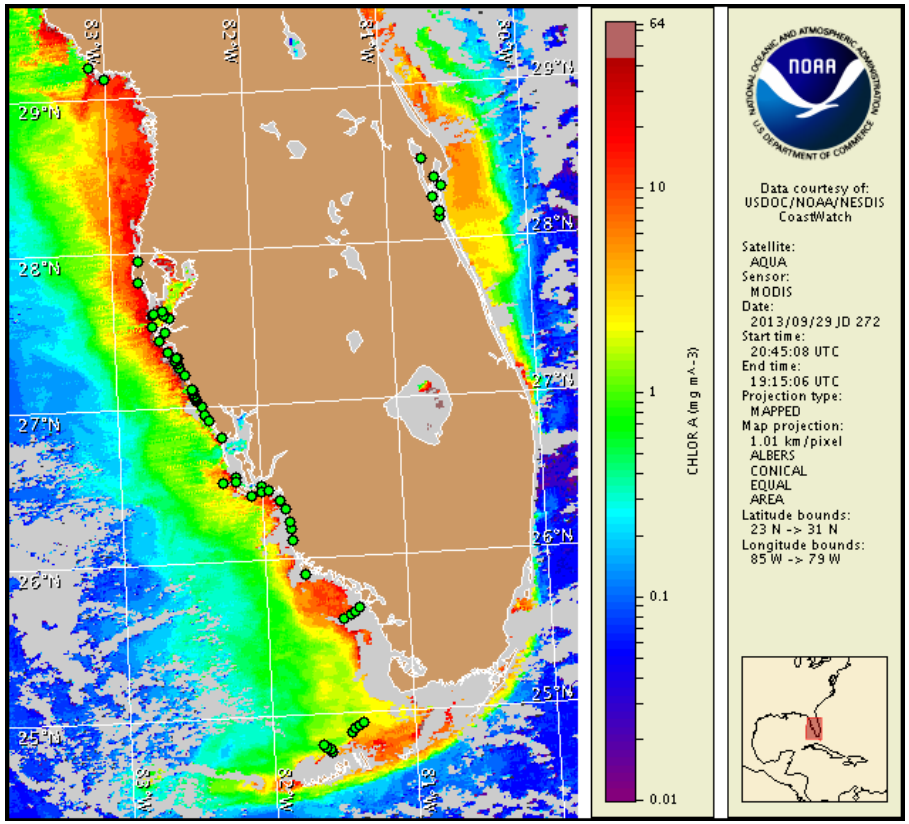
Monday, 30 September 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, September 23, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Karenia brevis (commonly known as Florida red tide) ranges from not present to very low concentrations along the coast of southwest Florida, including the Florida Keys. No respiratory irritation is expected Monday, September 30 through Monday, October 7. Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations

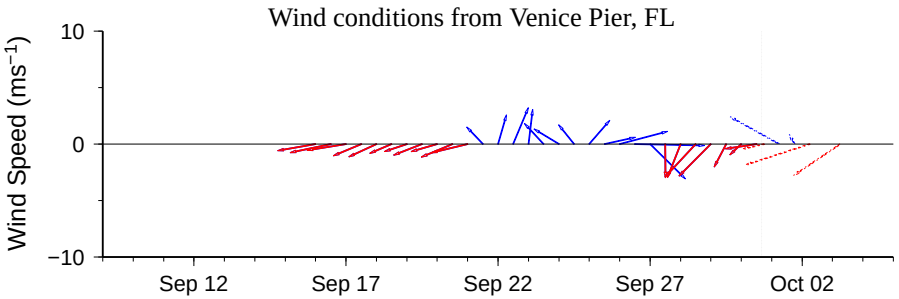
Analysis

Very low concentrations of *Karenia brevis* were identified in one sample collected alongshore Sarasota County at Bay Dock inside Sarasota Bay last week (FWRI, MML; 9/27). All other samples collected alongshore southwest Florida from Pinellas to Monroe County and offshore the Florida Keys indicate *K. brevis* is not present (FWRI, SCHD, MML, CCPCPD; 9/20-27). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past week (FWRI, MML; 9/23-29).

In recent MODIS Aqua imagery (9/29, shown left), patches of elevated to very high chlorophyll (3 to >20 μg/L) are visible along- and offshore the coast of southwest Florida from Pinellas to Monroe counties, with the highest levels stretching alongshore Manatee and Sarasota counties. Elevated chlorophyll at the coast is likely the result of mixed non-harmful algal blooms that continue to be reported in many southwest Florida counties.

Wind conditions are favorable for upwelling Tuesday through Friday, increasing the potential for K. brevis bloom formation at the coast this week.

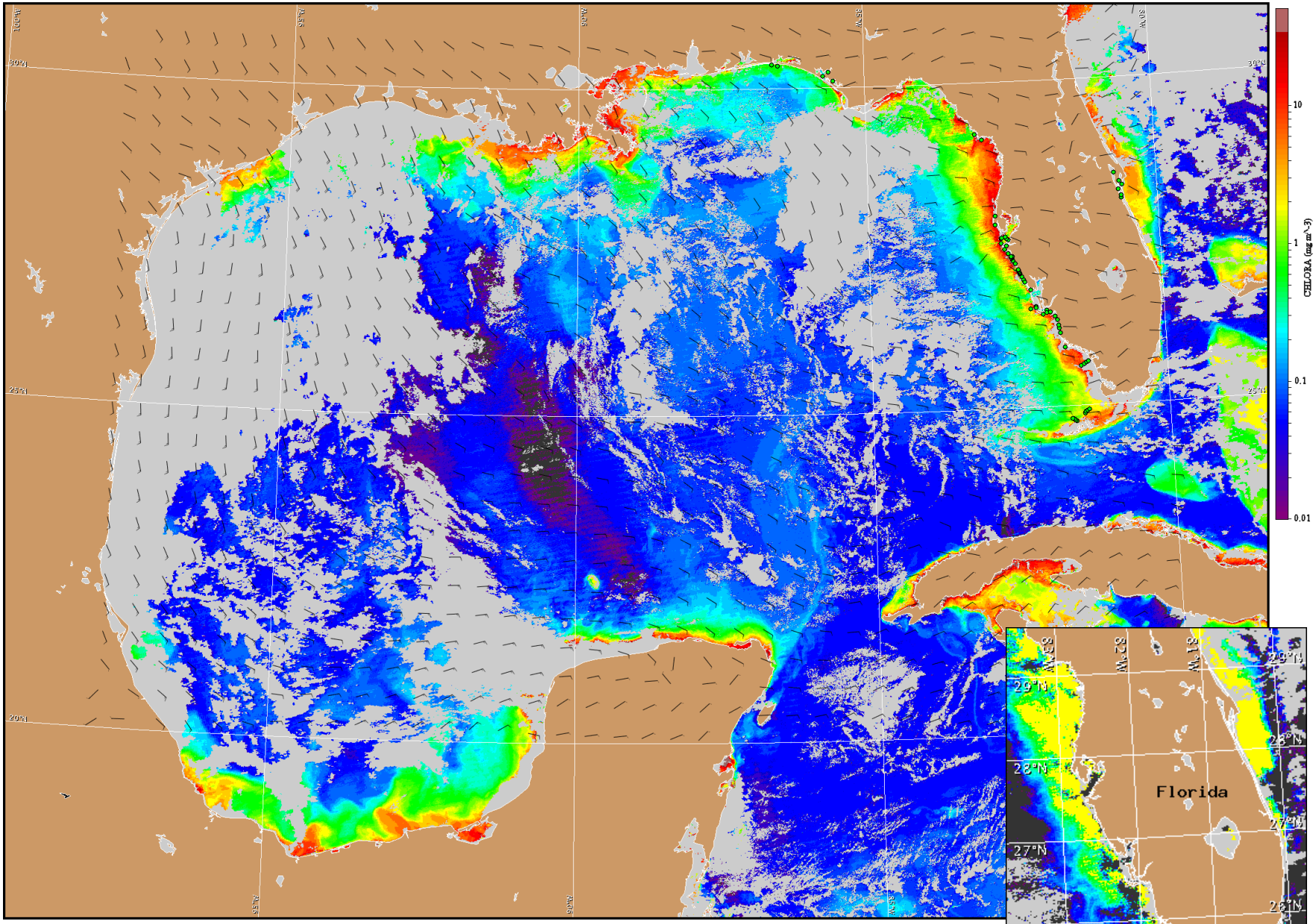
Burrows, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Southwest Florida: East winds (5-10kn, 3-5m/s) today. Variable winds (5kn, 3m/s) this evening becoming east winds (10-15kn, 5-8m/s) tonight. East winds (10kn, 5m/s) Tuesday. Northeast winds (10kn) Tuesday evening becoming east winds (15kn, 8m/s) overnight. East winds (10-15kn) Wednesday through Friday.



Satellite chlorophyll image and forecast winds for October 1, 2013 06Z with points representing cell concentration sampling data from September 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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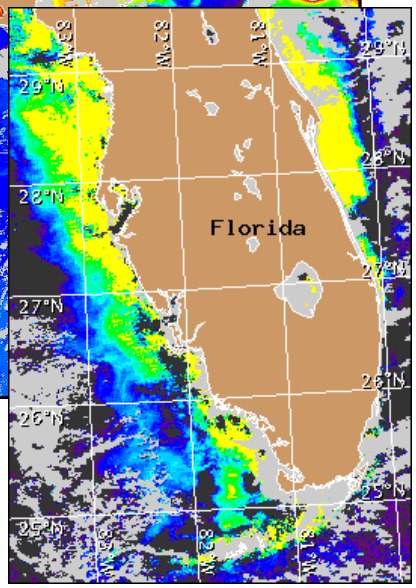

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).